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SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT:

- (A) NAME: DOMPE' S.p.A.
- (B) STREET: Via Campo di Pile
- (C) CITY L'AQUILA (E) COUNTRY: ITALY
- (F) POSTAL CODE (ZIP): 67100
- (ii) TITLE OF INVENTION: RECOMBINANT PROTEINS DERIVED FROM HGF AND MSP
- (iii) NUMBER OF SEQUENCES: 4
 - (iv) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE Thoppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)

(2) INFORMATION FOR SEQ ID NO: 1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1725 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (iii) HYPOTHETICAL: NO
 - (iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

ATGTGGGTGA CCAAACTCCT GCCAGCCCTG CTGCTGCAGC ATGTCCTCCT GCATCTCCTC 60 CTGCTCCCCA TCGCCATCCC CTATGCAGAG GGACANAGGA AAAGAAGAAA TACAATTCAT 120 GAATTCAAAA AATCAGCAAA GACTACCCTA ATCAAAATAG ATCCAGCACT GAAGATAAAA 180 ACCAAAAAG TGAATACTGC AGACCAATGT GCTAATAGAT GTACTAGGAA TAAAGGACIT 240 CCATTCACTT GCAAGGCTTT TGTTTTTGAT AAAGCAAGAA AACAATGCCT CTGGTTCCCC 300 TTCAATAGCA TGTCAAGTGG AGTGAAAAAA GAATTTGGCC ATGAATTTGA CCTCTATGAA 360 AACAAAGACT ACATTAGAAA CTGCATCATT GGTAAAGGAC\GCAGCTACAA GGGAACAGTA 420 TCTATCACTA AGAGTGGCAT CAAATGTCAG CCCTGGAGTT CCATGATACC ACACGAACAC 480 AGCTATCGGG GTAAAGACCT ACAGGAAAAC TACTGTCGAA ATCCTCGAGG GGAAGAAGGG 540 GGACCCTGGT GTTTCACAAG CAATCCAGAG GTACGCTACG AAGTCTGTGA CATTCCTCAG

TGTTCAGAAG TTGAATGCAT GACCTGCAAT GGGGAGAGTT ATCGAGGTCT CATGGATCAT 660 ACAGAATCAG GCAAGATTTG TCAGCGCTGG GATCATCAGA CACCACACCG GCACAAATTC 720 TTGCCTGAAA GATATCCCGA CAAGGGCTTT GATGATAATT ATTGCCGCAA TCCCGATGGC 780 CAGCCGAGGC CATGGTGCTA TACTCTTGAC CCTCACACCC GCTGGGAGTA CTGTGCAATT 840 AAAACATGCG\CTGACAAAGC TTCGGGCGGT GGCGGTTCTG GTGGCGGTGG CTCCGGCGGT 900 GGCGGTTCTC TAGAGGGACA AAGGAAAAGA AGAAATACAA TTCATGAATT CAAAAAATCA GCAAAGACTA CCCTAATCAA AATAGATCCA GCACTGAAGA TAAAAACCAA AAAAGTGAAT 1020 ACTGCAGACC AATGTGCTAA TAGATGTACT AGGAATAAAG GACTTCCATT CACTTGCAAG 1080 GCTTTTGTTT TTGATAAAGC AAGAAAACAA TGCCTCTGGT TCCCCTTCAA TAGCATGTCA 1140 AGTGGAGTGA AAAAAGAAYT TGGCCATGAA TTTGACCTCT ATGAAAACAA AGACTACATT 1200 AGAAACTGCA TCATTGGTAA AGGACGCAGC TACAAGGGAA CAGTATCTAT CACTAAGAGT 1260 GGCATCAAAT GTCAGCCCTG GAGTTCCATG ATACCACACG AACACAGCTA TCGGGGTAAA 1320 GACCTACAGG AAAACTACTG TCGAAATCCT CGAGGGGAAG AAGGGGGACC CTGGTGTTTC 1380 ACAAGCAATC CAGAGGTACG CTACGAAGTC TGTGACATTC CTCAGTGTTC AGAAGTTGAA 1440 TGCATGACCT GCAATGGGGA GAGTTATQGA GGTCTCATGG ATCATACAGA ATCAGGCAAG 1500 ATTTGTCAGC GCTGGGATCA TCAGACACCA CACCGGCACA AATTCTTGCC TGAAAGATAT 1560 CCCGACAAGG GCTTTGATGA TAATTATTGC &GCAATCCCG ATGGCCAGCC GAGGCCATGG 1620 TGCTATACTC TTGACCCTCA CACCCGCTGG GAGTACTGTG CAATTAAAAC ATGCGCTGAC 1680 AAAGCTGACG ACGACGACAA ACACCACCAC CACCACCACC ACTAG 1725

(2) INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 amino acids
- TYPE: amino acid
- STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Met Trp Val Thr Lys Leu Leu Pro Ala Leu Leu Leu Gln His Val Leu 15 1 10

Leu His Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln 25 20 30

Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr 45 35 40

Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val 50 .55 60

Asn Thr Ala Asp Gln dys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu 80 75 65

Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys 95 85

Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe 100 110 105

Gly His Glu Phe Asp Leu Tyt Glu Asn Lys Asp Tyr Ile Arg Asn Cys 115 120 125

Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys 130 135 140

Ser Gly Ile Lys Cys Gln Pro Thp Ser Ser Met Ile Pro His Glu His 155 160 145 150

Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr Cys Arg Asn Pro Arg 175 165 170

Gly Glu Glu Gly Gly Pro Trp Cys Rhe Thr Ser Asn Pro Glu Val Arg 190 180

Tyr Glu Val Cys Asp Ile Pro Gln Cy's Ser Glu Val Glu Cys Met Thr 205 195 200

Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp His Thr Glu Ser Gly 220 210 215

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Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro His Arg His Lys Phe Leu Pro/Glu Arg Tyr Pro Asp Lys Gly Phe Asp Asp Asn Tyr Cys Arg Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr Thr Leu Asp Pro His Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys Ala Asp Lys Ala Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Leu Glu Gly Gln Ard Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr **B**25 Lys Lys Val Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu Pro Phe\ Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys Leu Trp Rhe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile 39Q Arg Asn Cys Ile Ile Gly\Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr Cys Arg Asn Pro Arg Gly Glu Glu Gly Gly Pro Trp Cys Phe Thr Ser Asn Pro Glu Val Arg Tyr Glu Val Cys App Ile Pro Gln Cys Ser Glu Val Glu Cys Met Thr Cys Asn Gly Glu Sen Tyr Arg Gly Leu Met Asp His Thr Glu Ser Gly Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro His Arg His Lys Phe Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp Asp Asp

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Cys Arg Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr Thr Leu 530 535 540

Asp Pro His Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys Ala Asp 545 550 555

Lys Ala Asp Asp Asp Lys His His His His His His 565 570

INFORMATION FOR SEQ ID NO: 3:

- (i) SEQUENCE\CHARACTERISTICS:
 - (A) LENGTH: 1692 base pairs
 - (B) TYPE: \nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (iii) HYPOTHETICAL:\NO
 - (iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

ATGGGGTGGC TCCCACTCCT GCTGGTTCTG ACTCAATGCT TAGGGGTCCC TGGGCAGCGC 60 TCGCCATTGA ATGACTTCCA AGTGCTCCGG GGCACAGAGC TACAGCACCT GCTACATGCG 120 GTGGTGCCCG GGCCTTGGCA GGAGGATGTG GCAGATGCTG AAGAGTGTGC TGGTCGCTGT 180 GGGCCCTTAA TGGACTGCCG GGCCTTCCAC TACAACGTGA GCAGCCATGG TTGCCAACTG 240 TTCCAGAAGA AAGACTACGT ACGGACCTGC ATCATGAACA ATGGGGTTGG GTACCGGGGC ACCATGGCCA CGACCGTGGG TGGCCTGCCC TGCCAGGCTT GGAGCCACAA GTTCCCGAAT 420 GATCACAAGT ACACGCCCAC TCTCCGGAAT GGCCTGGAAG AGAACTTCTG CCGTAACCCT 480 GATGGCGACC CCGGAGGTCC TTGGTGCTAC ACAACAGACC CTGCTGTGCG CTTCCAGAGC 540 TGCGGCATCA AATCCTGCCG GGAGGCCGCG TGTGTCTGGT GCAATGGCGA GGAATACCGC 600 GGCGCGGTAG ACCGCACGGA GTCAGGGCGC GAGTGCCAGC GCTGGGATCT TCAGCACCCG 660 CACCAGCACC CCTTCGAGCC GGGCAAGTTC CTCGACCAAG GTCTGGACGA CAACTATTGC 720 CGGAATCCTG ACGCTCCGA GCGCCATGG TGCTACACTA CGGATCCGCA GATCGAGCGA 780 GAGTTCTGTG ACCTCCCCG CTGCGGGTCC GAGGCACAGC CCCGCCTCGA GGGCGGTGGC GGTTCTGGTG GCGGTGGCTC CGGCGGTGGC GGTTCTCTAG AGGGACAAAG GAAAAGAAGA ANTACANTIC ATGAATICAA AAAATCAGCA AAGACTACCC TANTCAAAAT AGATCCAGCA

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CTGAAGATAA AAACCAAAAA AGTGAATACT GCAGACCAAT GTGCTAATAG ATGTACTAGG 1020

AATAAAGGAC TTCCATTCAC TTGCAAGGCT TTTGTTTTTG ATAAAGCAAG AAAACAATGC 1080

CTCTGGTTCC CCTTCAATAG CATGTCAAGT GGAGTGAAAA AAGAATTTGG CCATGAATTT 1140

GACCTCTATG AAAACAAAGA CTACATTAGA AACTGCATCA TTGGTAAAGG ACGCAGCTAC 1200

AAGGGAACAG TATCTATCAC TAAGAGTGGC ATCAAATGTC AGCCCTGGAG TTCCATGATA 1260

CCACACGAAC ACAGCTATCG GGGTAAAGAC CTACAGGAAA ACTACTGTCG AAATCCTCGA 1320

GGGGAAGAAG GGGGACCCTG GTGTTTCACA AGCAATCCAG AGGTACGCTA CGAAGTCTGT 1380

GACATTCCTC AGTGTTCAGA AGTTGAATGC ATGACCTGCA ATGGGGAGAG TTATCGAGGT 1440

CTCATGGATC ATACAGAATC AGGCAAGATT TGTCAGCGCT GGGATCATCA GACACCACAC 1500

CGGCACAAAT TCTTGCCTGA AAGATATCCC GACAAGGGCT TTGATGATAA TTATTGCCGC 1560

AATCCCGATG GCCAGCCGAG GCCATGGTGC TATACTCTTG ACCCTCACAC CCGCTGGGAG 1620

TACTGTGCAA TTAAAACATG CGCTGACAAA GCTGACGAC ACGACAAACA CCACCACCA 1680

CACCACCACCT AG

(2) INFORMATION FOR SEQ ID NO: 4:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 563\amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:\ single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

Met Gly Trp Leu Pro Leu Leu Leu Leu Thr Gln Cys Leu Gly Val
1 10 15

Pro Gly Gln Arg Ser Pro Leu Asn Asp Phe Gln Val Leu Arg Gly Thr 20 30

Glu Leu Gln His Leu Leu His Ala Val Val Pro Gly Pro Trp Gln Glu
35 40 45

Asp Val Ala Asp Ala Glu Glu Cys Ala Gly Arg Cys Gly Pro Leu Met 50 55 60

Asp Cys Arg Ala Phe His Tyr Asn Val Ser Ser His Gly Cys Gln Leu 70 75 80

Leu Pro Trp Thr Gln His Ser Pro His Thr Arg Leu Arg Arg Ser Gly Arg Cys Asp Leu Phe Gln Lys Lys Asp Tyr Val Arg Thr Cys Ile Met Asn Asn Gly Val Gly Tyr Arg Gly Thr Met Ala Thr Thr Val Gly Gly Leu Pro Cys Glm Ala Trp Ser His Lys Phe Pro Asn Asp His Lys Tyr Thr Pro Thr Leu Arg Asn Gly Leu Glu Glu Asn Phe Cys Arg Asn Pro Asp Gly Asp Pro Gly Gly Pro Trp Cys Tyr Thr Thr Asp Pro Ala Val Arg Phe Gln Ser Cys Ely Ile Lys Ser Cys Arg Glu Ala Ala Cys Val Trp Cys Asn Gly Glu Gl\u03c4 Tyr Arg Gly Ala Val Asp Arg Thr Glu Ser Gly Arg Glu Cys Gln Arg Trp Asp Leu Gln His Pro His Gln His Pro Phe Glu Pro Gly Lys Phe Leu Asp Gln Gly Leu Asp Asp Asn Tyr Cys Arg Asn Pro Asp Gly Ser Glu\Arg Pro Trp Cys Tyr Thr Thr Asp Pro Gln Ile Glu Arg Glu Phe Cys App Leu Pro Arg Cys Gly Ser Glu Ala Gln Pro Arg Leu Glu Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly 280' Gly Gly Gly Ser Leu Glu Gly Gln Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val Asn Thr Ala Asp Gln Cys Ala Asn **B**30 Arg Cys Thr Arg Asn Lys Gly Leu Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe Gly His Glu Phe Asp Leu Tyr Glu

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Asn Lys Asp Tyr lle Arg Asn Cys Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr Cys Arg Asn Pro Arg Gly Glu Glu Gly Gly Pro Trp Cys 435 Phe Thr Ser Asn Pro Glu Val Arg Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu Val Glu Cys Met Thr Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp His Thr Glu Ser Gly Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro His Arg His Lys Phe Leu Pro Glu Arg Tyr Pro Asp Lys

Lys Thr Cys Ala Asp Lys Ala Asp Asp Asp Asp Lys His His His

Gly Phe Asp Asp Asn Tyr Gys Arg Asn Pro Asp Gly Gln Pro Arg Pro

Trp Cys Tyr Thr Leu Asp Pro His Thr Arg Trp Glu Tyr Cys Ala Ile